# Project Report: Year 6 Educational Activities and Progress

## Project Progress

Educational efforts of the Goddard Center for Astrobiology have included the implementation of a pilot program called the 2004 Summer Undergraduate Internship in Astrobiology (SUGIA), the initiation of a high school curriculum development project with the Minority Institution Astrobiology Collaborative (MIAC), and the modification of an undergraduate Astronomy course at the University of Maryland, College Park (UMCP).

### Summer Undergraduate Internship in Astrobiology

The 2004 Summer Undergraduate Internship in Astrobiology is a 10−week program for undergraduate students. Students work with a mentor and participate in weekly seminars, laboratory visits, and a field trip to Greenbank Radio Observatory. The SUGIA program culminates with a poster presentation and a brief seminar given during the August 9th NAI Forum in Astrobiology Research (FAR) Seminar.

### Astrobiology in the Secondary Classroom

A team of four high school teachers and three Historically Black Colleges and Universities ( HBCU) science faculty were brought to Goddard to develop curriculum materials for high school chemistry and Earth science classes. The project, "Origin and Evolution of Organics in Planetary Systems−Astrobiology in Secondary Classrooms," includes two years of materials development and field−testing followed by three years of summer workshops. The MIAC educators interacted with Goddard Node scientists Mumma, Dworkin, DiSanti, and Moore, the SUGIA interns, and Susan Hoban, principal investigator on the Virtual Telescopes in Education (VTIE) project.

### Astro 380−Life in the Universe

Beginning in the fall 2004 semester, Marla Moore will teach Astro 380 (Life in the Universe), a 3−credit course designed for non−science majors of junior standing at the University of Maryland, College Park. Astro 380 is the study of the astronomical perspectives on the conditions for the origin and existence of life in the universe. Moore will incorporate current knowledge from various

laboratories within the node, reflecting the multidisciplinary nature of the problems addressed in astrobiology. Implementing this type of course was one of the goals of our proposal.

## Highlights

- The initial session of the MIAC curriculum development project was held on June 28–July 2 at Goddard Space Flight Center.
- The 2004 Pilot SUGIA program includes five students from Connecticut College, Cornell University, Salem College, and Smith College.
- Preparations for undergraduate observations of comets in support of the Deep Impact Discovery Mission are well underway in collaboration with MIAC (under the supervision of DiSanti).

## Mission Involvement

| ***Mission Class**** | ***Mission Name (for class 1 or 2) OR Concept (for class 3)*** | ***Type of Involvement*** |
|---|---|---|
| 1 | Deep Impact | Other |

* Mission Class: Select 1 of 3 Mission Class types below to classify your project:
1. Now flying OR Funded & in development (e.g., Mars Odyssey, MER 2003, Kepler)
2. Named mission under study / in development, but not yet funded (e.g., TPF, Mars Lander 2009)
3. Long–lead future mission / societal issues (e.g., far–future Mars or Europa, biomarkers, life definition)

** Type of Involvement = Role / Relationship with Mission
Specify one (or more) of the following: PI, Co–I, Science Team member, planning support, data analysis, background research, instrument/payload development, research or analysis techniques, other (specify).